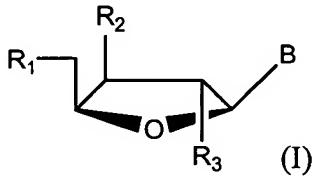
Amendments to the Claims

The following listing of claims shall replace all prior versions, or listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A method for the preparation of 2'- or 3'-deoxy- and 2',3'-dideoxy-β-L-pentofuranonucleoside compounds of formula I:



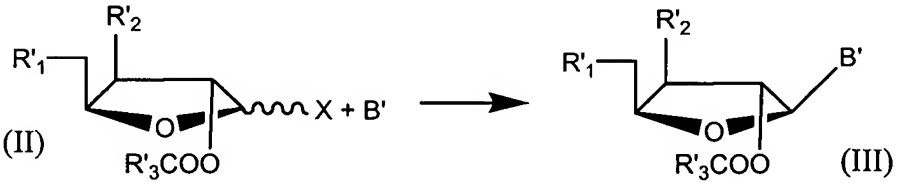
(I)

in which

- B represents purine or pyrimidine base selected from the group consisting of adeninyl, guaninyl, hypoxanthinyl, uracilyl, thyminyl, cytosinyl, 5-halo-uracilyl and 5-halo-cytosinyl;
- R_1 represents OH;
- R_2 and R_3 represent, independently of each other, H or OH; and
- at least one of R_2 and R_3 represents H;

~~characterized in that~~ comprising the following steps ~~are carried out~~:

1) a compound of formula (II) is condensed with the base B' in order to obtain the compound of formula (III) according to the scheme



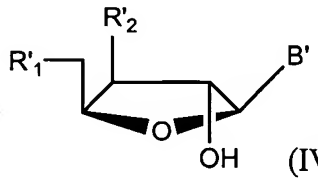
in which formulae (II) and (III):

- R'_1 and R'_2 have the meanings given for R_1 and R_2 except that when R_1 and R_2 represent OH, the OH group is protected by a protecting group selected from the group consisting of an acyl, a benzoyl, a benzyl or a silyl group,
- R'_3 ~~represents~~ is a C_1 to C_5 alkyl group or a phenyl radical,

- X is a leaving group ~~such as~~ selected from Cl, Br, I or a C_1 to C_5 acyloxy or alkoxy group,

- B' is a purine or pyrimidine base B which is optionally ~~appropriately~~ protected by a protecting group selected from the group consisting of an acyl, a benzoyl, a benzyl or a silyl group,

2) the R'_3COO group at the 2' position is removed by deacetylation so as to obtain an OH group and a compound of formula



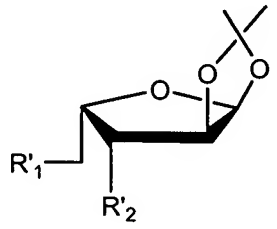
(IV)

3) optionally, the OH group at the 2' position is removed by a deoxygenation reaction; and

4) where appropriate, the R'_1 and R'_2 groups and the B' base are deprotected so as to obtain the compounds of formula (I).

2. (Currently Amended) The method according to Claim 1, ~~characterized in that~~ wherein ~~in the compounds (II) and (III),~~ R'_3 ~~represents~~ is a C_1 to C_5 alkyl group.

3. (Previously Presented) The method according to Claims 1 or 2, further comprising preparing the compound (II), in which X and R'_3COO represent an O-acetyl group, by acetolysis of a 1,2-isopropylid-ene-L-xylofuranose compound of formula (V)

(V)


4. (Currently Amended) The method according to Claim 1, ~~characterized in that~~ wherein R'_2 and R'_3COO are different.

5. (Currently Amended) The method according to Claim 1, ~~characterized in that~~ wherein the compounds of formula (I) are prepared in which R_2 and R_3 represent H or OH.

6. (Currently Amended) The method according to Claim 1, ~~characterized in that~~ wherein the B is ~~represents one of the adenine, guanine, hypoxanthine, uracil, thymine or cytosine bases, wherein these bases may be substituted by a halogen at the 5 position for cytosine and~~

~~uracil~~ selected from the group consisting of adeninyl, guaninyl, hypoxanthinyl, uracilyl, thyminyl, cytosinyl, 5-halo-uracilyl and 5-halo-cytosinyl.

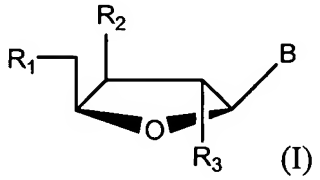
7. (Currently Amended) The method according to claim 1 for the preparation of a compound of formula (I) in which B is cytosineyl, further comprising a step wherein a compound in which B is uracilyl is converted to a compound of Formula I in which B is cytosine by converting uracilyl to cytosineyl by the process of:

i) adding acetic anhydride and pyridine;

ii) adding Lawesson's reagent and dichloroethane; and

iii) adding ammonical methanol.

8. (Currently Amended) A stereoisomeric β-L-pentofuranonucleoside compound corresponding to the following formula



(I)

in which

- B ~~represents one of the uracil, thymine or cytosine bases, wherein these bases may be substituted by a halogen at the 5 position for cytosine and uracil,~~ selected from the group consisting of adeninyl, guaninyl, hypoxanthinyl, uracilyl, thyminyl, cytosinyl, 5-halo-uracilyl and 5-halo-cytosinyl;

R_1 represents OH and,

- either R_2 represents OH and R_3 represents H,
- or R_2 represents H and R_3 represents OH.

9. (Currently Amended) The compound according to Claim 8, wherein B represents uracilyl, cytosineyl or 5-fluorocytosineyl.

10 - 16. (Canceled)

17. (Currently Amended) The method according to Claim 1, ~~characterized in that in the compounds (II) and (III),~~ wherein R'_3 represents CH_3.